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OULD VITAMIN D BE GIVEN ONLY TO INFANTS?

VITAMIN D has been so successful in preventing rickets during infancy that there has been little emphasis on continuing its use after the second year.

But now a careful histologic study has been made which reveals a startlingly high incidence of rickets in children 2 to 14 years old. Follis, Jackson, Eliot, and Park* report that postmortem examination of 230 children of this age group showed the total prevalence of rickets to be 46.5%.

Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

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THE JOURNAL OF SCHOOL HEALTH

Devoted to the interests and advancement of school health service and instruction. Your participation by membership is solicited.

Vol. XVI JANUARY, 1946 No. 1

REPORT OF THE COMMITTEE ON TUBERCULOSIS, AMERICAN SCHOOL HEALTH ASSOCIATION

The last United States census revealed that there were 45,305,604 persons from birth to nineteen years old. This is more than one-third of our entire population of 131,669,275. In the total group of this age period, 34,764,080 were of school age. The personnel of the schools consists of more than 1,000,000 members.

As first president of the National Tuberculosis Association, E. L. Trudeau in 1905 said: "The first and greatest need is education; education of the people, and through them education of the state. It is evident that if every man and woman in the United States were familiar with the main facts relating to the manner in which tuberculosis is communicated and the simple measures necessary for their protection, not only might we reasonably expect as a direct result of this knowledge a great diminution in the death rate of the disease, but the people would soon demand and easily obtain effective legislation for its prevention and control. When a state has once become well educated, and not before, will the other requisites necessary to the control of the disease be forthcoming."

The schools afford our best opportunity to educate the public with reference to tuberculosis control in all of its phases. This was recognized by Dr. Charles H. Keene, when, as President of the American School Health Association in 1934, he appointed a Committee on Tuberculosis.

Through the schools there is the opportunity of teaching the fundamentals of tuberculosis to a large group of individuals. The best possible teaching is done by conducting the actual procedures among the students and personnel and thus help them to demonstrate that the environment of their schools can be rendered free from tubercle bacilli. Obviously, if the fundamentals are established in the minds of the personnel and those whom they instruct, a sound campaign against tuberculosis will be waged by them in the later years of their lives.

During the last few years there has been a strong shift in tuberculosis interest from children to adults. This is probably due to at least two factors: 1. It has long been known that the incidence

of clinical tuberculosis is many times higher among adults than among children. Indeed, chronic reinfection type of pulmonary tuberculosis is a rarity during the period of childhood. X-ray inspection of the chest reveals evidence only of gross lesions and since these are more prevalent in adults than in children, it is only natural that as far as this phase of an examination is concerned, the interest should have been diverted to adults.

2. Most of the persons engaged in military service and industries are adults and X-ray film inspections of their chests are easily obtained because they can be made compulsory by military authorities, employers and labor organizations. The importance of rejecting or removing all persons with gross, contagious pulmonary tuberculosis from the military service or from industry is obvious.

The examination of large numbers of adults is laudable and this phase of the program should be increased and intensified. However, it should never encroach upon or detract from the tuberculosis work in schools. Unfortunately, this shift of activity in the tuberculosis field has led many persons to believe that the work in schools should be abandoned. The examination of school children has never netted a large revenue in clinical cases of tuberculosis. Nevertheless, we are faced with the important fact that the child with primary tuberculosis (tuberculous infection) in the pre-X-ray stage today is often the adult with clinical and contagious tuberculosis tomorrow. Therefore, a tuberculosis control program that neglects the infected child by failing to detect his infection, by failing to seek its source, and by failing to examine him periodically when adulthood is attained, must be considered inadequate.

Moreover, large numbers of adults are included in our schools. All high school students, of which there are more than 12,000,000, and all members of the personnel, comprising more than 1,000,000 individuals, are as important from the standpoint of having tuberculosis detected as those engaged in military service and industry.

Two years ago the members of this Committee recommended that a method be devised whereby individual schools or entire school systems be certificated with reference to tuberculosis control activities. It was thought that the standards for certification would necessarily differ in various states, depending upon such factors as the incidence of tuberculous infection. Therefore, it was considered preferable for the members of the state subcommittees on tuberculosis to decide upon the standards for their respective states. (There is a subcommittee in each state.) At some subsequent time, however, it might be possible to have uniform standards which could be applied to the entire nation.

Minnesota Qualifications for Certification

The subcommittee for the State of Minnesota, consisting of Dr. E. A. Meyerding, chairman, Dr. S. A. Slater and Dr. L. S. Jordan, has given careful consideration to requirements for certification in their state and have adopted the following qualifications for various classifications:

Class 'A' Certificate*

An individual school or an entire school system may be certified as Class 'A' when:

1) 95-100 per cent of the children have been tested every other year with tuberculin of adequate dosage (1.0 milligram of old tuberculin or 0.05 milligrams of purified protein derivative for those not reacting to smaller doses) with the following subsequent procedures:
   a) Children of grade school age who react to tuberculin need no other phase of the examination unless symptoms or signs are present. However, their family physicians and the local health department should be notified in order that the source of their infection may be sought among their adult associates.
   b) All tuberculin reactors shall have X-ray inspection of the chest during the freshman and senior years of high school, and whenever a shadow is found, complete examination shall be made to determine the etiology of the lesion causing the shadow.
   c) All nonreactors to tuberculin from kindergarten through high school shall be retested at least every two years, and preferably every year. Those who become reactors since the last testing shall be dealt with in the same manner as those who reacted to the first test.
2) All members of personnel of a school or system to be certified shall have the tuberculin test administered with the same dosage as for children. This includes teachers, engineers, cooks, bus drivers, and all others employed by the schools.
   a) All nonreactors shall be retested every two years.
   b) All reactors on first or subsequent testing shall have X-ray film inspection of the chest. When-

ever a shadow is found, the examination shall be completed to determine whether the lesion casting the shadow is tuberculous and, if so, whether it is of present clinical significance.

c) All reactors, regardless of X-ray findings in the chest, shall be examined with reference to tuberculous lesions in other parts of the body which might be discharging tubercle bacilli.

3) All students and members of personnel who are found to have progressive tuberculosis in any part of the body, that is, in the contagious stage or threatening to become so in the near future, shall be removed from school until adequate treatment has been administered and the danger of contagion is remote.

4) An educational program shall be required to make sure that the teaching staff understands thoroughly the underlying principles of tuberculosis control. This can be accomplished by devoting one period of the weekly staff meeting each semester to this subject. A short questionnaire to determine whether or not correct impressions are received to follow the lecture. The questionnaire to be discussed openly so that the teachers can carry the information concerning tuberculosis to their students.

Class 'B' Certificate

The same as for Class 'A' but when only 80-95 per cent of the children from kindergarten through high school are tested with tuberculin.

Class 'C' Certificate

In schools where the tuberculin test is not administered for such reasons as a high percentage of infected individuals, at least 95 per cent of the high school students and members of personnel shall have X-ray film inspection of the chest. Those whose films present shadows shall be completely examined to determine the etiology of the disease.

A complete physical examination, in addition to the X-ray inspection of the chest, shall be done to detect those who may have sinuses, etc., discharging tubercle bacilli.

Class 'D' Certificate

Schools which have a regular program for tuberculin testing and X-raying of specified grades and school personnel, but do not

comply with the requirements for Class 'A', 'B' or 'C', may be awarded a Class 'D' recognition certificate.

This subcommittee has already certified all of the public and parochial schools in Northfield, Minnesota (Figure 1). Other schools are qualifying. One sanatorium medical director states that he plans during 1946 to have every school certified in the four counties he serves. The members of the Minnesota subcommittee declare that in many years no project has stimulated so much interest and activity in tuberculosis control in the schools.

FIGURE 1

TUBERCULOSIS CONTROL AWARD

AMERICAN SCHOOL HEALTH ASSOCIATION

This is to certify that

NORTHFIELD PUBLIC SCHOOLS

has fulfilled the minimum requirements of the American School Health Association for the control of tuberculosis, in consideration for which a Class "A" Certificate is granted.

E. A. MEYERDING, M.D.
Tuberculosis Chairman for Minnesota

S. B. M. Rueters, M.D.
President

A. O. DeWeese, M.D.
Secretary

October 15, 1945.

Certifications in Other States

Subcommittees in other states are working on qualifications for certification of schools. We do not anticipate that any two states will set up identical requirements; however, we are convinced that wherever certification of schools is instituted the tuberculosis program will be accelerated.

Certification is not a new idea in the tuberculosis control movement. Indeed, it was an effective weapon employed by the veterinarians in controlling tuberculosis among cattle in the United States. Recently certification of counties with reference to human tuberculosis control has become extremely popular where it is practiced. It makes a strong appeal to local pride and creates an interest in the problem which is impossible by any other means. Certification of individual schools and school systems has already been

shown to have a similar effect and should materially hasten the time when tubercle bacilli are not disseminated from person to person in the schools of this country.

Dr. William P. Brown, Albany, New York
Dr. Hughe A. Browne, Alexander, Arkansas
Major H. A. Burns, St. Paul, Minnesota
Dr. Seth L. Cox, Topeka, Kansas
Dr. H. D. Lees, Philadelphia, Pennsylvania
Col. Esmond R. Long, Washington, D. C.
Dr. J. B. Novak, Chicago, Illinois
Dr. William P. Shepard, San Francisco, California
Dr. Chester A. Stewart, New Orleans, Louisiana
Dr. J. A. Myers, Chairman, Minneapolis, Minnesota

* * * * *

Saginaw Tells Parents of Kindergarteners What to Expect,— The public school system of Saginaw, Michigan, has published a 12-page booklet, "From Home to School," which is sent to the parents of all prospective kindergarteners.

The need for architecture in the guiding and building of a child's life was seen by Chester F. Miller, superintendent of schools in Saginaw, and it was with this need in mind that the committee of Saginaw teachers prepared this initial blueprint of the child's first contact with school. In content, there are two streams of thought. The one explains to the parent just what the kindergarten will do for his youngster. The child's development, his growing sense of responsibility, all his new experiences are described.

In addition, a schedule of the child's program of work for the day is outlined so that the parent may know what he is doing at any given hour. The other side of the question is presented, too. The duties of the parent in making his child's start in school life a success are put squarely up to him. The essentials of proper attitude and personal habits, of knowledge of name and address, adequately labeled clothing and such are all cited. The attitude of the parent is also emphasized — his confidence in the teacher, his visits to the school and attendance at Parent-Teachers' Association meetings, and interest in the child's report card.

As a step toward a successful school life, the health habits and care of the child are listed and health center addresses and hours are given.

The sum of this little book shows and explains the need of the school for understanding and help at home. By working together, much can be accomplished that neither can do alone. School Management, October, 1945, p. 84.

TUBERCULOSIS IN CHILDREN*

ARTHUR H. PARMELEE, M.D.
Chief of Staff, Children's Division, Cook County Hospital

Tuberculosis is an acquired disease, usually the result of close association with an individual with open tuberculosis. Infants and young children living in the same house with open cases are peculiarly vulnerable because of their dependency upon close intimate care by adult members of the family.. Pollak in 1911 found that of 285 children who lived in homes where there was an open case only 6 were tuberculin negative. In this group, out of 49 nursing infants only 2 were negative, of 33 one-year-old infants only 1, and of 29 two-year-olds none were negative. It is clear from these figures that infants and young children have almost no chance of escaping infection when living in such an environment.

Not only are they almost certain to be infected under such circumstances, but if they remain in that environment they have a very small chance of survival for they are subjected to repeated re-infections and it is usually the re-infection that results fatally. It has been customary to speak of childhood types of tuberculosis, and adult types. We would be more accurate to designate primary or first-infection types and re-infection types. It is possible for an adult to have a first-infection or so-called childhood type, and likewise an infant may have a so-called adult type if frequently re-infected.

When an individual, whether a child or an adult is infected with tuberculosis for the first time the disease takes on a different character than when subsequent infections occur because of the different manner in which his tissues react to the invading organism and its toxins. At the time of his first infection, his tissues are anergic, he has no specific reaction to the tubercle bacillus and its toxins and all his reactions are non-specific. The pathologic process produced is known as the primary complex, that is, the primary inflammatory focus together with the regional lymphotics and lymph glands which take part in the inflammatory reaction. Soon the body reacts to this specific infection by producing specific antibodies and within a few weeks this change in tissue reaction can be demonstrated through the response to tuberculin skin tests. He is no longer anergic but allergic to the tubercle bacillus and its toxins. The practical result of this is that if now or at any later time he is subjected to a re-infection his tissues will respond in an

*Read before Conference on Control of Tuberculosis in a Metropolitan Area, Chicago, Illinois, Nov. 13. 1945. Conference sponsored by the Institute of Medicine of Chicago.

entirely different manner. The pathologic response in the lungs to the re-infection results in a different kind of lesion from the primary complex of the first-infection. The tendency of the primary complex is for the perifocal inflammatory reaction to heal by going through a productive indurative change walling off a small area of caseation which subsequently becomes calcified. On the other hand, when re-infection occurs there is a strong tendency toward regressive and necrotic changes with destruction of lung tissue. The morphologic changes are usually so definite that they can be recognized by means of the X-ray.

The difference between primary tuberculosis or first-infection type and re-infection type of tuberculosis is a morphobiologic one, that is, a changed biologic reaction to the tubercle bacillus and its toxins and consequently a different inflammatory response which causes a different lesion in the lungs. Primary infections tend to heal while re-infections tend to destroy lung tissue and make recovery much more difficult.

Primary infections are however not to be considered lightly for they too may have serious consequences. It is probable that the primary complex in the lung is not the only infected area in many cases. Tubercle bacillis may be carried in the blood stream to other parts of the body, for example, to the brain and there produce a tuberculoma which may later be the cause of a fatal meningitis. The casual contact of a child with a tuberculous relative or friend of the family may result in such a tragedy. But even more important is the danger of the first-infection being the source of re-infection. We call this endogenous re-infection and it is possible under certain conditions which are unfavorable to the healing of the primary complex. An attack of measles or whooping cough in a child with a primary complex may produce such unfavorable conditions and result in the activation of a latent focus. Extensive re-infection may result with the same serious consequences as when re-infection occurs from without, or exagenous re-infection.

The failure of either the primary complex or the re-infection lesions, to heal may lead either to true Phtisis with cavitation and all the rest, or may result in a generalized spread through the lungs and even through the entire body. We recognize two routes of generalized spread of the disease which, however, probably overlap in many instances. Hematogenous spread occurs when a caseous focus breaks into a vein discharging innumerable tubercle bacilli into the blood stream to be carried to all parts of the lung and to other areas in the body as well. The result of such a caseous lesion erodes a bronchial radicle and discharges its contents into the air

passages to be distributed through the entire bronchial tree thus producing a tuberculous broncho-pneumonia.

A great majority of first infections heal under favorable conditions, but the child who has once been infected with the disease carries with him a potential danger. It is true that under favorable circumstances he may be in a sense protected by a certain degree of immunity but it is equally true that when unfavorable health conditions exist his sensitivity to the disease is increased and his susceptibility to re-infection either endogenous or exogenous is heightened. He thus has a health hazard which the non-tuberculous child does not have. Children who have been infected with tuberculosis need, therefore, the best possible environment from a physical health standpoint in order to be protected from an ever-present potential danger.

The history of the progress of the tuberculous lesions in the individual infected with the disease is a very complex one. We cannot say as we can of syphilis that he is in the primary, secondary or tertiary stage of the disease, the progress of tuberculosis is much more complicated. The history in tuberculosis is that of a series of attacks separated by longer or shorter intervals. The result of each attack is unpredictable because it is dependent upon so many factors having to do with the general state of the child's health at the time and upon the degree of specific immunity or sensitivity prevailing in his tissues. He may succumb to any one of these attacks or he may successfully overcome the invasion. He is always faced with the possibility of subsequent attacks and with the same uncertainty of the outcome.

Tuberculosis in an infant or a young child means more than just the illness of that child, its implications constitute a major public health problem. It means first that in all likelihood some other member of that family is an open case of tuberculosis and is a menace not only to that family group but to all others with whom he comes in contact. It means also that the infected child must be removed from that environment in order to prevent frequent re-infections which would make his recovery almost impossible. This involves the availability of institutions for the care of infants and young children with tuberculosis. In addition there must be a careful investigation of the family not only to find and properly isolate the one who was the source of the infection, but also to see if other members have also been infected. The public health responsibility does not stop here, for the child must eventually return to its home, and unless that home has been made safe to receive him he will almost certainly be reinfected and practically nothing will have been accomplished.

The problem which confronts us can be best illustrated by reviewing the status of the tuberculous child in Cook County who is under four years of age.

The Municipal Tuberculosis Sanitarium accepts no children under five and then only if they are proven open cases. Oak Forest accepts no children under four and then only if they are proven non-infectious.

This means that if a child under four is admitted to a hospital and found to be tuberculous he must either remain in the hospital or be sent home, where further contact with an open case of tuberculosis is probable and where even if the open case has been removed living conditions are likely to be poor.

The situation brought about by this dilemma in the Children's Division of Cook County Hospital in April of this year was as follows: There were at that time thirty-eight children with tuberculosis in the hospital who were under four years. Of these, four were less than one year old, eleven one to two years old, thirteen two to three years old, and ten three years and under four. Not counting ten who had been in the hospital less than one month, the average stay of the remaining twenty-eight children had been five months.

Eleven of these patients had minimal lesions, negative stomach washings, were free from temperature, and were otherwise healthy children who should not be in a hospital but could not be sent home because the conditions there were poor or because there was still an open case in the home and a foster home was not available. There were also ten other patients whose X-ray findings were somewhat more extensive but whose stomach washings had been repeatedly negative and whose general condition was good. All of these would probably have been better off in a good home environment or in a convalescent institution if such had been available.

The remaining seventeen cases had more advanced lesions and positive stomach washings and were definitely in need of either hospital or sanitarium care.

The reports received from other children's hospitals in Chicago show a similar experience in regard to the young child with tuberculosis. Their experience is also similar to ours at Cook County Hospital in regard to older children and may be summarized as follows:

1. It is difficult to get children with open tuberculosis admitted to the Municipal Sanitarium, and this is particularly true as regards Negro children. The diagnosis of the referring hospital is

often questioned and the referral of children otherwise discouraged.

2. The follow-up work which is the responsibility of the Municipal Tuberculosis Sanitarium is not prompt nor is it thorough in respect to case finding in the homes of children reported, and in respect to instructions for the protection of other members of the family.

3. There is no adequate provision for the care of children under 4 years of age in the Chicago area.

Summary and conclusions:

There is urgent need of more adequate facilities for sanitarium care of tuberculous children of all ages.

There should be adequate provision for either foster home care or convalescent institution care of those tuberculous children who are non-infectious and who cannot go to their own homes, so that they may lead a more normal life than is possible in a general hospital.

The problem of tuberculosis in children is a serious public health problem, for which there is not as yet a well considered and co-ordinated program. Such a program for the metropolitan area of Chicago is imperative.

* * * * *

Oleomargarine,—Misinterpretation is being placed on the action of the Council on Foods and Nutrition in withdrawing acceptance from individual brands of oleomargarine. Reports published in the periodicals devoted to the interests of the dairy industry and comment stimulated in the public press falsely attribute this action to a lack of confidence in the nutritional value of margarine. Such is not the case. The report of the Council on Foods and Nutrition in The Journal, Sept. 16, 1944, stated clearly that margarine is considered a general purpose food and therefore outside the Council's scope of acceptance, now limited to "special purpose" foods. For this reason acceptance is no longer granted to margarine. Confidence in the nutritional value of margarine fortified with Vitamin A was reaffirmed by the Council at the time acceptance was withdrawn. The attempts of those opposing margarine to cast doubt and suspicion on its food value as a result of the withdrawal of acceptance by the Council are unwarranted and misleading. The Journal of the American Medical Association—Vol. 128, No. 2, May 12, 1945, Page 132.

* * * * *

SHALL WE TUBERCULIN TEST SCHOOL CHILDREN?

ALLAN FILEK, M.D.
Director, Division of Tuberculosis
Wisconsin State Board of Health

Whether or not to tuberculin test grade school and high school children depends upon a variety of factors, including available medical and public health nursing personnel, finances, time and desired objectives. Each community must answer the question for itself, taking into consideration the above factors as well as other known facts about the nature of tuberculosis.

If each community had one nurse per 2,000 population and unlimited funds, the question could readily be answered in the affirmative for we could then assume that the educational advantages alone to be derived from a tuberculin testing program of school children would be sufficient justification. However, few if any communities in Wisconsin are so fortunately situated at the present time as to have adequate medical and public health nursing personnel. In making the decision, then, we must be realistic.

After all, our objective should be to eradicate tuberculosis. One way of accomplishing that goal is to find the cases. We know that there are perhaps in the neighborhood of 6,000 undiscovered cases of tuberculosis throughout the state. "Look for gold where gold is to be found" the old saying goes, so let us look for tuberculosis where we may expect to find it.

At the present time tuberculosis does not appear among the first five causes of death in the following age groups: under one year, 1 to 4, 5 to 9, or 10 to 14. It ranks third as a cause of death in the 15 to 19 year group, second in the 20 to 24 age group and from second to fourth in the age group from 25 to 50. This would indicate that the emphasis on tuberculosis case findings should take place among older age groups, which fact is further borne out by the accompanying graph showing the mortality from tuberculosis by age and sex for the years 1940 to 1942. The rate is low in infancy and almost hits rock bottom at 8 years of age, continuing at this low level until 13 years when the curve begins to rise for males and also for females at a somewhat steeper incline. The peak of tuberculosis mortality in females is reached at about 30 years of age but for males it is not reached until about 60 years of age. In the last 10 years there has been a gradual shifting of the line, indicating that fewer deaths have been occurring in the younger age groups and more in the older age groups, relatively speaking.

A study was made some years ago in one of the districts of the state where tuberculin testing had been carried out largely among

grade and high school children, but other age groups were also included. It was estimated that more tuberculosis was found per hundred individuals tested and X-rayed in the under 5 years' age group and in the age groups over 20 than in the age groups 5 to 20.

As far back as 1935 the president of the American Association of School Physicians appointed a committee to study the tuberculosis problem in the schools. The committee stated that "Inasmuch as the reinfection type of chronic pulmonary tuberculosis is much more prevalent among children of high school age than in children of earlier years, it is recommended that when the program must be limited, testing be omitted after first grade; that all children in the last year of high school, and if possible the junior year, have the tuberculin test administered and X-ray films of the chest made of all positive reactors."

The City of Chicago undertook a tuberculin testing program in the schools to exploit the educational value of the program and to discover the case finding potentialities represented by a follow-up of the positive tuberculin reactors into the homes with special reference to kindergarten and first grade children. It was believed at the time that tuberculin testing kindergarten and first grade childrn and then investigating the homes of the positive reactors would yield a high number of new cases of tuberculosis discovered, since it seemed logical to assume that these positive reactors undoubtedly obtained their infections in the homes. The Chicago authorities concluded that finding tuberculosis in this manner is expensive. They estimated that for 586 cases found by this method the cost for discovering one case was $511.95. This cost included not only the child diagnosed but also cases discovered among school employees, cases found through follow-up into the homes and cases discovered by X-raying other groups. Plunkett of New York gives a cost of $4,419 per case discovered for children under 15 years of age. The Chicago authorities concluded, "Why work a low grade ore when rich ore is available and easily accessible to the case finding machinery?"

It must be remembered that we are speaking of routine programs. Where special problems exist such as tuberculosis in a school teacher, janitor, bus driver or other employee who has been in contact with the children for a prolonged period, such conditions alter the case and a tuberculin testing survey in a given school or given community may be necessary.

If we are to look for rich ore, our experience with the 35 mm. photofluoroscopic traveling unit and with the 4 x 10 unit, which has been in one general hospital and in state institutions would indicate

that the richest ore is to be found by X-raying inmates and personnel of county institutions and asylums; the next richest ore by routinely X-raying hospital patients and employees. It has already been proved that contacts to actual cases of tuberculosis are a very important source. Since the death rate among females is quite high between the ages of 20 to 40, routinely X-raying prenatal patients should, and in communities that have tried it, does yield a significant number of new cases. Other studies have indicated that foreign born persons have higher rates.

Assuming that the objective of the local program is to eradicate tuberculosis by finding new cases and isolating those cases to prevent the spread of this communicable disease, the community should first determine how adequate is its program of X-raying inmates and personnel of county institutions, hospital patients and employees, prenatal patients, and foreign born persons and contacts. If it is adeqaute and there is still time, money and personnel available for additional case-finding, then that community is in a position to consider the tuberculin testing program of its children under the age of 12 or 13 years. Children above that age group might be considered in a somewhat different category because the death rate from tuberculosis begins to rise at about that point. To have a good tuberculosis case-finding program, however, a community should still cover the above mentioned groups adequately, in addition to a tuberculin testing program of those over 12 or 13 years of age, rather than to start with a tuberculin testing program and then have no time left for engaging in the important task of looking for tuberculosis where the ore is richest.

The educational value of tuberculin testing has as yet not been sufficiently demonstrated. The Chicago authorities state: "In view of the expenditure, the educational values are problematical." Personally the author feels that by providng an individual with a tuberculin test we are not always doing a good job of education. Very frequently the individual does not know what sort of a test is being given. When questioned as to what the significance of a positive reaction may be, he cannot answer. All too frequently individuals do not even know whether they had a positive or a negative reaction to the tuberculin test. It may well be that we have miseducated many of these children into believing that the proper time to have a tuberculin test is when they are in school, and that after leaving school they can forget all about tuberculosis. Actually, if our mortality statistics mean anything, exactly the reverse is true.

Surely there must be some other way of educating the school children about the facts of tuberculosis and how to protect them-

selves and their community from this preventable disease, which would really be of some significance to them and considerably less expensive than the tuberculin test. If administering the tuberculin test really does educate them, by all means let us use it. If it does not, let us find something better.

* * * * *

Health Program,—Girls who are nervous, underweight, overweight, easily fatigues, or otherwise below par are being given a chance to improve their state of health under an experimental nutrition program started at Flora Stone Mather College, Western Reserve University, Cleveland, O.

Thirty-six students were initially enrolled for various reasons. While in this experimental program, they will be under the guidance and supervision of seven public health nurses from six states and Puerto Rico, who are taking graduate work at Reserve in public health nutrition.

The students have a variety of difficulties, organic, physical and neurological. Ten are overweight or underweight, and their food intake and diets are being supervised.

Some of the students, instead of working in the gymnasium, are given periods of rest and relaxation. Others are prescribed body mechanics with an especially selected sport. Programs of nutrition are also mapped out for them. The prescriptions are all designed to fit individual needs.

"This is the first time in the history of physical education that, to our knowledge, such thorough and individualized work has been offered to meet the health requirements of the girls," commented Miss Emily R. Andrews, professor of physical education at Mather College. "We hope to expand it to meet the individual needs of all students who are below par."

Two rooms have been reserved at the University Health Service Building on the campus for use of the student participants. One is a rest room with three cots where students may spend their rest periods. The other is a consultation room where the public health nutritionists may interview the students, reviewing home conditions and other factors which may be influencing their health.

The program is under the direction of Miss Andrews, Dr. Helen A. Hunscher, Professor of Home Economics and Chairman of the Public Health Nutrition Program, and Dr. A. B. Denison, Director of the Student Health Service at the University.

STRIVING FOR COMPLETENESS IN A SCHOOL HEALTH PROGRAM

R. W. BARDWELL*
Chairman, Wisconsin Cooperative School Health Council

The staff of the La Crosse schools have during the past two years become aware of the need for general cooperation on the part of all teachers in the development and operation of a more complete and well rounded health program. They have also come to recognize more clearly the necessity for a close cooperative relationship with the parents whenever an individual health problem is indicated, and with the community agencies such as the City Health Department when general measures are required or professional investigations and service are needed.

The measures having to do with more effective cooperation within the teaching staff may be of interest. The entire staff of 232 teachers is organized into twelve committees, each committee drawing its members from the total range of school grades, kindergarten through the senior year of high school. Each committee works in one general area of instruction, as science, social studies, health and safety, etc. The committee on health and safety, for example, assumes the responsibility for the organization of the health program in all the grades in all the schools. With the health educator from the State Board of Health and the health coordinator from the Wisconsin Cooperative School Health Program as consultants, this committee has drawn up an outline of health instruction, health services and practices which, over the 13 year period, it believes to be essential for the developmnt of sound, vigorous persons. Thus it presents a continuous program in which each teacher is able to see what has been done to insure the health of the child before she assumes direct responsibility during the one year, and she also can see what the plan is for the years ahead, so that she will not cause needless repetition of work at a later period.

The teacher committee on health and safety not only outlines this 13 year program but it asks the other 11 communities to examine their respective programs for health education content and to note every instance in which their material has to do directly with the health of the individual or with public health. In response to this request the committees on physical education, science, social studies, reading, art and home economics have reported the specific items in their courses of study related directly to the health program. Bringing this material together and presenting it in a com-

*Superintendent of Public Schools, La Crosse.

bined form to each classroom teacher makes it much more probable that the health program will be complete and will cover as wide a scope in the daily program of each child as deliberate planning can provide.

The need for cooperation with the groups outside the school organization has received attention. The staff of nurses in the health department of the city have for several years beeing doing an excellent job in their child health and home visiting service. The pre-school or "getting-ready-for-school" examinations have received a new impetus through cooperation from the county medical society and the local press and radio in announcing and publishing stories on the value to the child of such examinations. The dental hygienist in the department of health has developed a good program of examination and promotion of dental service in cooperation with the county dental society. These programs have been worked cooperatively by the schools, the health department, and the medical and dental societies, so that there has been a minimum of friction and misunderstanding and a maximum of service to children needing such service.

In the improvement of the school environment the health committee has set up standards relating to lighting, seating, heating, ventilating, and sanitation. On these items, starting with one school as a demonstration center, they have requested certain definite improvements from the Board of Education. A special health room for temporary isolation and treatment of emergency cases is being provided. Indoor and outdoor play areas are being improved. Health libraries for parents and teachers have been assembled. In this one school an effort is being made to establish as completely as possible every part of a complete well rounded program. This includes the organization of health instruction, an increase in the awareness and interest of pupils regarding their health, the immunization of all children, the close cooperation of parents in such items as nutrition, sleep, sanitation and health habits in the home. From this beginning in this demonstration school it is hoped to bring about improved standards in every school in the city.

The cooperation on the part of the homes is being promoted by a committee of the Central Council of parents and teachers, representing all parents and teachers in the city from both parochial and public schools. This committee is making a study of health factors affecting children and the standards of child health in the city as revealed by the vital statistics during the past five years. These statistics include the causes for the rejection, due to physical defects, of draftees for military service from La Crosse. In their

preliminary report submitted in May, 1945, this committee notes that parents have not been organized to set up and systematically put into operation an effective child health program. They recognize that in order to have an effective health program in the home "where the most important health program really belongs," they, the parents, should be "just a little more organized and get from the several agencies a little more consistent help. Every parent wants to preserve his child's health, to give him a fair chance for a useful, happy, and successful life. Through the schools to some extent, the parents can be helped to achieve this, to learn how to do their full part in developing physical fitness in their children."

This statement by a committee representing the parents of all the school children of the city indicates an awareness and an appreciation of the value of a good child health program that augurs well for its final achievement.

* * * * *

Bad Light Warps Pupils,—Bad lighting in schoolrooms is a major cause of bad body posture in children, Dr. Darrell B. Harmon of the Texas State Department of Health declared before a recent meeting here of the Illuminating Engineering Society at Chicago. The poor youngsters, ducking their heads and twisting their bodies to avoid the glare of one-sided illumination, in a few years become lopsided themselves, with the faults grown into their very bones.

Dr. Harmon made a detailed study of pupils' postural responses to lighting in four widely separated Texas schools, with special attention to the lower grades, where the children's bodies are still plastic,

Schoolrooms with a row of windows on one side and light-absorbing blackboards on the other have glaring one-sided illumination. Pupils getting too much light on their work tend to back away from it, putting strain on their over-extended arms and shoulders. A much more common fault, however, is imposed by insufficient illumination, as when the light falls from the right and throws the shadow of the writing hand across the written lines. The struggling student then leans toward his work and humps his head and shoulders over it to get his eyes closer.

Remedial illumination tried in one grade schoolroom brought about notable improvement in the pupils in six months. Science Service.

pediculosis - a classroom problem

"It is highly probable that infestation with lice is rather common among school children. . . ."
Shelanski et al., Arch. Dermat. & Syph. 51:179, 1945.

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SCHOOL HEALTH EDUCATION

HERMAN J. NORTON
Director Health Education, Rochester Public Schools

The complexities of modern existence demand that human beings of all ages must have healthy bodies and minds and a capacity for great endurance if they are to be successful in life. This point of view seems to be basic for the very existence of a progressive democracy and is generally accepted now as vitally important.

Ignorance, superstitions, and procrastination about health matters, still remain widespread. While many people know health theory, they have failed to put it into daily practice. We find, however, a steadily increasing interest in the subject of health education on the part of the general public.

World War II was largely responsible for establishing health education in the schools of New York State as a required subject for graduation, and as an integral part of the general education program.

The term "health education" is now glibly and commonly used with many contrasting and sometimes meaningless interpretations. There is considerable lack of clarity as to its meaning and purpose. It may be roughly classified into two major programs: (1) Public Health Education; (2) School Health Education.

We, in the schools, consider health education to mean "the sum of all experiences which favorably influences habits, attitudes, and knowledge relating to individual, community and racial health." We, furthermore, interpret individual health to mean total health, physical, mental, social, emotional and spiritual.

We consider the organization and administration of the school health education program to be a cooperative enterprise involving the active interest, opinions, and services of different groups within the school, all acting under the alert leadership of the school principal. Such cooperative procedures involve the contributions of health and physical education teachers, general science, home economics, psychological services, guidance, the school lunch room, school nurse, school physician and other specialists. We, furthermore, believe that the school program should articulate with the programs of outside health agencies, and that it should have the sympathetic understanding and hearty cooperation of the home.

Since the whole child goes to school and the whole child must be educated, then health education must make a unified impression on the whole school and on the whole child. It will have an in-

creasingly important place in the general educational process just as soon as school authorities and parents recognize its importance in the all around growth and development of the child. As soon as this recognition is made and acted upon, you will find superintendents and members of Boards of Education working together in an effort to allocate more of the education budget to the health education field.

There have been different outlooks on education from time to time. These outlooks have been based primarily on our interpretation at the moment, of the learning process. We have had, for example, the traditional point of view, emphasizing the three "Rs" only and the child brought "into line" as it were. Formerly, it was felt, that truths could be set down, presented to the child, and he could learn them by heart.

Science has done a great deal to lead us away from the traditional methods. Study originally was a matter of rote learning. This method was based on non-living procedures which did not fully meet the vital needs of the child. Because of the "scientific approach" we have reconstructed our educational thinking. It is now based on the concept that what the child does from day to day and the total experience is what really counts in the educational process. This concept includes the type of world in which the child lives and the fact that this world is continually presenting new experiences. Life is made as we go along and we must remake our old patterns to meet the new situations. We have all heard the phrase "education for life." Today we know that education is life, and that it comes from every-day experiences during all the waking hours of the child.

Where, then, you might ask, does the physical welfare of the child fit into this scheme of education? One of the best methods of aiding children in the development of health ideals, attitudes, and habits is to have them participate in health programs in which they assume a large share of the responsibility for the organization and conduct of the project. In this way, they "learn by doing"; they have a chance to show initiative and to pass through cooperative experiences which convince them of the real merit of the health training presented. We want children to seek health through healthful living for the purpose of developing sound minds in sound bodies.

We are all conscious of the fact that a pupil's training is conditioned by the state of his health. If a child is hampered by susceptibility to disease, physical defects, or bad habits of living, it

will be more difficult for him to meet with full success in his intellectual work. At any rate his achievement would be of little value to him in life without physical vigor.

Every principal and teacher in the Rochester schools is striving to have his pupils develop into emotionally healthy and well-balanced individuals. They realize that ill health or physical handicaps often have important long time effects upon the development of personality. If a child is physically weak, or in ill health, this condition usually affects his disposition and his mental outlook on life, and often leads to deviations from normal cooperate behavior. His mental and physical work in the home suffers and he takes on a different personality from that which he carries around with him when he is enjoying good health.

Of course, the principals and teachers need the active cooperative of the home, if the health teaching of the school is to become really effective in the daily lives of the 33,738 boys and girls now attending our public schools. Parents can help their children to achieve buoyant health through cooperation with the school physicians and nurses in carrying out recommendations made by the medical adviser and the child's family physician.

Health education, therefore, as applied to the school resolves itself into creating and maintaining those conditions, experiences, and opportunities that will enable each individual connected with the school to do his best work with maximum satisfaction and enjoyment to himself and to society during both school and past school life.

In closing, I wish to thank the many Rochester physicians for the gracious and generous help which they have given to the speaker and to his school associates, in the building of our present program of health education for Rochester's school children.

THE RETURNING SERVICEMAN

FREDERICK L. PATRY, M.D.
Albany, New York

Keeping in mind individual differences, there will always be the necessity of tailor-cutting methods of managing the individual personality problems that may be encountered in assisting returning servicemen. There are, however, certain basic attitudes and principles which we should keep in mind. The following guideposts are suggested:

1. The return to civil life will be difficult for many. This will be so not only because of changes in the home environment to that which he left behind, but also because the soldier has been trained to a new way of life. Over a period up to four years he has been highly trained as either a killer or an artisan or both in the army. Reconditioning to a peaceful and constructive environment will not be easy for many. In fact, a fair percentage will never be the same again. The majority, however, with patience and sympathetic understanding may be salvaged for successful civilian adjustment.

2. Opportunities for rehabilitation under expert counselling and with adequate facilities are essential. Just as there was a period for training the civilian for the art of war, so there will be needed a period of detraining or retraining for civilian activities. It should also be kept in mind that many returning men never made a place for themselves in civilian environment prior to enlistment. This group will need special attention in educational and vocational counselling.

3. Each serviceman's assets should be discovered and opportunities created to enhance them toward some skillful occupation in keeping with interest, ability and talent.

4. There is, of course, a rational and necessary place for pensions. The handicapped in mind and body should be compensated for temporary or permanent service-connected disabilities. However, we must not harbor the idea that disabilities can be a perpetual handicap and can be compensated for by any sum of money. No soldier wishes to be treated as an object of charity. He wishes to regain or maintain his self-respect and feeling of personal worth through employment which will show him off to advantage in reasonable accomplishment. Many will not be satisfied to return to civilian status without an opportunity to use the capacity for leadership which they have developed during wartime. The training for new responsibilities is in order. There is an illusion that ser-

vicemen will be capable of automatically reverting to their pre-enlistment social and occupational status.

5. Social readaptation to civilian life is a two-way matter. It involves the soldier's attitude toward the community, but equally important is the attitude of the community to him. Servicemen have richly given of themselves as a matter of duty and merely ask for just recognition of their services but not for praise, pity, curiosity or charity. He wishes to regain his sense of independence and resents being molly-coddled. He would like to have his disability ignored and discounted. Most of all, he wishes to feel wanted and needed in some useful niche in community life. But this will require team-work on the part of employer, family, government and community agencies with the individual involved. Systematic job-analysis in keeping with fluctuating labor markets will be a problem for the sociologist and the psychologist in evaluating kind and level of ability and adaptability. A very large burden of responsibility will fall upon the shoulders of psychiatrists and psychiatric social workers since neuropsychiatric cases at present number 32 out of every 100 discharged veterans and forty per cent of adjudicated claims allowed have been for nervous and mental disabilities.

* * * * *

Physical Rejections For Women,—The Bureau of Public Relations, War Department, released publicly last March the first official statistics on the physical rejections for women. Approximately 33 per cent of all applicants for enlistment in the Women's Army Corps from October 1, 1943, through September 1, 1944, were rejected for medical reasons. A detailed breakdown of the principal causes of medical rejections for white and colored applicants follows: psychiatric and neurological, 22.0%; gynecological and genito-urinary, 17.9%; cardiovascular, 8.2%; eye conditions, 7.9%; overweight, 6.6%; ear, nose, and throat conditions, 5.0%; underweight, 4.7%; venereal disease, 4.4%; pulmonary tuberculosis, 4.1%; teeth, 3.1%; other causes, 16.1%. Health and Physical Education, Vol. 16, No. 8, October, 1945, p. 450.

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EDITORIAL

With this month, we begin a new year and, we hope, a new era. While New Year's Day, as a time for resolves regarding our efforts for the coming year has been practically ridiculed out of the picture, nevertheless it is a time for reorienting our ideas and procedures.

While school health programs usually go into new and higher levels with the beginning of the school year in September, January is none too early for plans for improvements and expansions to be made, for budgets to be considered and for our salesmanship to get organized. A successful campaign for selling any advance in school or public health must be organized, information on which sales talks may be based must be collected, analyzed and tabulated, contacts with many groups established or strengthened, and definite plans for presenting information of accomplishment, needs and costs must be thought out.

While most of our readers are more interested in those phases of public health relating to the schools and to the school ages, nevertheless there are numerous contacts and inter-relationships with public health in which school health workers and school administrators should be well informed and deeply interested.

The material from the Report of the City Health Officer of Los Angeles appearing on page 26 is a definite accounting of that

officer to those whose health is concerned and whose dollars support the city health program. It presents much of interest and shows the lines of attack on health problems in that community, and, while no two communities are exactly alike, conditions in them are similar.

The Report is concise, shows a goal with several targets, and definite results, and is followed by a short table of per capita expenditures of the largest five cities in the United States. While not many of us live in any of those cities, the table does give us a basis for comparison with our own community per capita expenditure, just as the Report gives us an opportunity for comparison of the targets and power of the arrows in our own schools and cities. —*C. H. K.*

* * * * *

ABSTRACTS AND NOTES

Los Angeles' Health in 1944,—Dr. George M. Uhl, City Health Officer of Los Angeles, has issued the following report on health conditions in Los Angeles during 1944:

"At 1944's end, Los Angeles was running a temperature, but it could hardly be said to have had a high-grade fever. The city had passed its third war year bulging with an over-crowded population, and it had been hit by a few wartime diseases, none of which reached epidemic proportions. Its health, while good, was far from perfect.

"Once again, with extraordinary cooperation from the community, major health emergencies had been averted. For a need which the U. S. Public Health Service said was $2,000,000, the city had frugally spent $900,000. Sorely needed to tackle critical problems were equipment, facilities, and personnel.

"The city had closed its purse to many exigencies, but for every Health Department dollar it spent it had driven a good bargain. It managed to keep its milk supply pure through inspections in 1,400 dairies and milk stations as far as 300 miles from Los Angeles. It maintained safe conduct for food in 8,000 bakeries, dairies, restaurants, and 3,000 markets. It kept a watchful eye on health conditions in 900 industries, 15,000 hotels and apartments, 4,000 barber shops and miscellaneous businesses, and 100 poultry and rabbit abattoirs. It pushed some diseases downward and kept others from skyrocketing by making 85,000 home calls, giving 300,000 treatments, and having full cooperation from the medical profession.

"To do all this, the department placed its 426 employees where

they could least be spared, dropped less pressing issues, asked and got public support. Los Angeles' aches were familiar ones.

"Again in 1944, tuberculosis, with 966 deaths, was second only to accidents in the toll of human life under 45 years of age, but its mortality rate had dropped two-thirds in the last quarter century. Meanwhile, although operating one of the largest ambulatory pneumothorax clinics in the country, the department could not accommodate all who came for tubercular care.

"Syphilis, with nearly 12,000 cases, led all other communicable diseases, its reported number still climbing as public awareness led to greater search for it. Venereal disease clinics, handling 200,000 patient-visits in the busiest year of their history, looked forward to the relief that would come with expanded postwar facilities.

"Diseases which spread with crowding made stubborn advances, the most serious threat coming from diphtheria, which struck more victims and took more lives in Los Angeles than in any other large American city. Its 330 cases and 23 deaths had reached what is hoped to be the crest of a wave that started in 1942, when war crowding began to revive the disease after it had almost been obliterated here. The department undertook a large-scale educational campaign, increased immunizations 50 per cent to 95 per cent to throw up a barrier that may turn the tide in 1945.

"But other diseases continued to decline. 1944 was the fifth consecutive year without a case of smallpox, and typhoid remained a grey shadow of its past formidable self. No cases of human rabies were recorded, and the trial operation of the 90-day leash law, in which dog bites dropped 41 per cent and animal rabies fell 37 per cent, demonstrated that the present permanent law held much promise for 1945 and following.

"The population of rats shrank considerably, but is estimated to remain above 1,000,000. The city could take comfort from the fact that its rats had an average of only two fleas each, whereas the danger signal is four. The department trapped rats throughout the city, dissected 12,000 to make certain that none were disease-bearing. Greatest hope came from 1944's rodent-control ordinance, which required shelter destruction, blockade, starvation, and poison for this most expensive parasite of man.

"Living space for the human population was crammed, but less so than in 1943. Greatest over-concentration was in single hotel rooms used as family residences; from these, and other makeshift dwellings lacking the bare essentials of housing sanitation, the department evicted 700 families.

"A record year for restaurant sanitation-enforcement, the

department closed 134 extremely unclean eating places, formally heard operators of 1,600 others, took legal action that brought 157 convictions. In voluntarily - attended education programs, the department gave courses in food care to 1,000 food handlers. Through these measures, and with the assistance of the restaurant industry, food poisonings ran 25 per cent below the five-year average.

"As a beginning in mosquito control, the department collected and hatched 11,000 larvae, identified and mapped 21 species, found only one serious malaria vector, but many that might carry encephalomyelitis. Twenty-two known breeding areas were completely wiped out and 29 others were under temporary control.

"Accident and disease still held a depressing hand on the life-span of Los Angeles' people, but the average age at death crept up 73 days during 1944 to reach 58.31 years. More dollars for public health could easily amputate the fingers of this depressing hand." *California's Health*, May 15, 1945. As reprinted in Health Education Journ.

* * * * *

We Blush,—Nominated for the "red-face department" this month is Los Angeles City.

The reason? Because Los Angeles has less money per person for sanitation, health, or hospital expenses than any other city in the United States with a population over 1,000,000.

Here are Department of Commerce listings for the nation's five largest cities:

	Sanitation	Health	Hospital
Chicago	$2.41	$ .61	$ .79
Detroit	4.35	1.06	2.75
Los Angeles	1.58	.52	.26
New York	4.08	.79	4.86
Philadelphia	2.29	.55	1.68

Are these facts important enough to cause red faces? *Bulletin L. A. Tuberculosis and Health Assn.*, March, 1945.

* * * * *

Be Kind to Questionnaires,—With a return to human behavior between wars, we have with us, as ever, our strife for better health. As a tool for acquiring information to that end the questionnaire will make a frequent appearance on the desk of the "busy practitioner" of school health work. It is a valuable instrument for finding out what others are doing, and what they would like to do, in this field. It has been much abused by many senders and more often damned by its recipients. As one who may have sinned as a seeker after knowledge by this means (although he tried to be conservative and considerate) and who has doubtless been cursed by many who have scanned his inquiries, may I sug-

gest greater tolerance for, and promptness and pains in replying to, these time-consuming, often badly worded and seemingly inconsequential documents.

In making this plea I am only putting into words what the best minds have put into practice. I recall with gratitude that my first venture was answered, in the most painstaking fashion, by none other than William Osler, who was by no means a man of leisure, and his reply, to a mere nobody, came within a few days. In more recent years the replies from two men, one distinguished in college hygiene and the other in public school work, have always been a joy because of their promptness and the completeness of the information furnished. Maybe they felt, from experience, what it means to receive such replies. They never failed me and I am sure they were as considerate of all inquiries that came to them. They had something to give, but if one has nothing to say it is even more easy to make a prompt reply: "I regret we are doing nothing along these lines," and "I have been teaching this gospel for some years, but I do not know that it is true," are answers I have received. They were complete and satisfying, even though they were hardly gratifying to anyone concerned.

I have known replies to be made as much as a year after the questions were received, although the answers, such as they were, could as well have been made within a week. The efforts of all were wasted.

The writer is not likely to offend by sending out another questionnaire, and he hopes he will not be thought too officious for suggesting that all who receive these documents be sympathetic and responsive to this method of seeking truth (whatever that is). A prompt and conscientious answer may only help some poor sinner obtain an academic label (without which he will get nowhere, no matter how deserving), but it may help just a little in furthering the business of improving human health and, heaven knows, it needs improving.

Returns from questionnaires, sent from worthy sources, seldom exceed 65%. Why not make it 100% in all cases? The composite picture obtained, whether or not it is a Titian, will be a better likeness of what is being sought. The whole truth is what we all wish and want.* (1) James F. Rogers, M.D., 2041 Rosemont Ave., N. W., Washington 10, D. C. Received Nov. 18, '45.

*Questionnaires from Dr. Rogers were well through out, therefore clear and concise, and they had a definite and worthwhile purpose.

Not all questionnaires can be so described. Many are prolix, covering a half dozen or more pages, (one of fourteen pages recently came to this office), many deal with trivialties, often they are so loosely phased that one cannot

decide what the questioner had in mind to ask, at times questions are duplicated, although differently phrased. Such poor questionnaires remind one, not of scientific research, but of a cheap lawyer trying to confuse the witness rather than to get to the truth and, lastly, even with great care and much above average knowledge of the meanings of words it is extremely difficult to write a question that means the same thing to all readers, who also often lack knowledge of the meanings and use of words.

A good questionnaire is a valuable tool. A poor one is an atrocity. Ed.

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Dental Care of Children,—Dental care for children of school age and adolescence is obligatory in Argentina. Children on entering school have a dental examination, the results of which are recorded on the proper card and the latter is kept on file. The examinations are repeated periodically. The parents are notified when the children require dental care, which can be given by the family dentist or free in the dental national centers. Parents who break the law are fined 20 to 50 Argentine pesos ($5.00 to $12.00). Teachers may be penalized with a fine of 100 Argentine pesos ($25.00). Repeated infraction is punished with temporary closure of the school if private, or with discharge of the teacher, if the school is operated by the government. Journal of American Medical Association, Volume 129, No. 2, September 8, 1945, p. 145.

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DR. CYRUS H. MAXWELL: Chief of the Bureau of Health Service of the New York State Department of Education, and a member of the Governing Council of the American School Health Association, has returned from military service.

Doctor Maxwell was called into service in November, 1940. He trained white and Negro troops at the Medical Replacement Training Center at Fort Lee, Va., and was then transferred to the Quartermaster School at Fort Lee, where he was surgeon to the School and to the Quartermaster Board for two years. He was also assistant executive officer of the Station Hospital at Fort Lee for four months. He went next to Fort Lewis, Wash., where he received training in hospital administration and also activated and trained the 250th General Hospital Unit, going overseas with this unit in January, 1945. He set up a hospital in Reims, France. Most of the patients treated were German soldiers.

Remaining in Reims until V-E Day, Doctor Maxwell was next assigned to the 123d Station Hospital Unit which he prepared for duty in the Pacific. He was transferred out of this unit on points to the 43d General Hospital (Emory University) Unit, where he was executive officer. Doctor Maxwell held the rank of lieutenant-colonel at the time of his discharge. He returned to the Department November 1st. Abstracted from Bulletin to the Schools, The University of the State of New York, November, 1945, p. 69.